

ON THE HYMENOPTERA OF THE GEORGETOWN MUSEUM, BRITISH GUIANA.*

BY P. CAMERON.

Part I.

The species of Hymenoptera in the British Guiana Museum having been sent to me for examination by Mr. J. Rodway, the Curator, I have thought it desirable to enumerate all the species, described and undescribed. In this paper I have dealt with the *Cynipidæ*, *Ichneumonidæ* and *Evaniidæ*. The number of new species is large, a fact not to be wondered at; seeing how very little has been written upon the Parasitic Hymenoptera of North-east South America and, indeed, of South America as a whole.

It gives me pleasure to state that the specimens are well-set, in good condition and free from traces of the ravages of mites or *Psoci*.

CYNIPIDÆ.

Charips (charips) guyanensis, sp.n.

Black, smooth and shining, the antennæ, legs and mandibles rufo-testaceous, the antennæ paler, more yellowish in tint than the legs, darker towards the apex; the palpi pallid yellow; wings hyaline, the nervures pallid testaceous; the apical abscissa of the radius roundly curved, as long as the part of the radius bounding the radial cellule; the cubitus not traced beyond the cubital cellule. The third antennal joint is distinctly thinner than the fourth, and not quite one-fourth longer than it. The radial cellule is closed in front.

On the same card as the female is a male which has the antennæ almost black from the 4th or 5th joint; the hind femora are darker coloured, being infuscated above and below.

Charips is the name adopted by Dr. Kieffer (Das Thierrich, Cynipidæ) for the genus formerly known as *Allotria* and *Xystus*, both these names being, it appears, pre-occupied.

EVANIIDÆ.

Evania rodwayi, sp.n.

Black, densely covered with a white silky pile, more sparsely so on the mesonotum; wings hyaline, the nervures black, inclining to fuscous; the recurrent

* Although but few of these have been found as parasites their importance in dealing with insect pests is incalculable. They preserve the balance of life and prevent the serious injury which might arise were insect plagues allowed free scope. In the following list it may be noted that one is from a castor oil pest, another from a sweet potato moth and a third from a calabash moth. Some pests of weeds may perhaps suggest that weeds themselves are pests, but as the larvæ are always liable to come upon our cultivated plants the parasites may be put down as exceedingly useful. The names given were not suggested by me.—J.R.

nervure received in second cubital cellule, clearly separated from the transverse cubital. Metasternal process distinctly roundly diverging. On the mesosternum between the four front legs is a furrow, divided by four keels, and ending in a larger ovate fovea, which is narrower and deeper at the base. The long spur of the hind tibiæ is about one-fourth of the length of the metatarsus and shorter than the second tarsal joint; the tibiæ spineless, the apices of the tarsal joints with some spines. The third and fourth antennal joints are almost equal in length. Malar space nearly as long as the fourth antennal joint. Hinder ocelli separated from each other by slightly more than twice the distance they are from the eyes. Male. Length 7 m.m.

Head, pro-and mesothorax smooth, except for a few punctures along the parapsidal furrows, a row of punctures at the apex of the propleuræ, five foveæ at the top of the apex of the mesopleuræ and some short keels below them, and some scattered punctures on the lower apical half. Parapsidal furrows complete, curved, converging towards the apex, the space between them there a little less than that outside them; there is a short furrow in the centre outside them. Metanotum reticulated below the abdomen, with scattered punctures and opaque before it; the metapleuræ almost smooth at the base, the rest with round, clearly separated punctures, except at the apex, where there is a row of short keels. Abdominal petiole smooth. Hind coxæ sparsely, weakly punctured on the outer and lower side.

In Mr. Bradley's table in Trans. Am. Ent. Soc. xxxiv, p. 168, this species could only be confounded with *E. rufidorsum*, Szép. and *E. signata*, Schl.; but these two species differ in sculpture and colouration.

Evania erythraspis, sp.n.

Black, the scutellum rufous, the apex of the mesonotum tinged with rufous, the mandibles of a darker red, with the teeth black; the underside of the antennal scape and the basal three or four joints of the flagellum of a brownish red; the anterior legs yellowish testaceous, their coxæ black behind and at the base in front, the apical joint of the trochanters black, the middle legs similarly coloured but darker in tint; all the spurs yellowish, the hinder reaching not far from the middle of the metatarsus, longer than the second joint. Metasternal process with the forks thick, short, diverging. Wings hyaline, the stigma black, the nervures fuscous, the recurrent nervure roundly curved, received very shortly beyond the transverse cubital; the transverse median nervure interstitial. Male.

Length 4 m.m.

Face densely covered with silvery pubescence, irregularly punctured, a curved furrow on either side of the middle of lower half, the malar space more closely and distinctly punctured; the front and vertex strongly punctured, the punctures large and clearly separated, stronger on the outer than on the centre. Ocelli large, the hinder separated from each other by double the distance they are from the eyes. Malar space short, one-third of the length of the eyes. Mesonotum strongly punctured, almost smooth behind, the furrows wide and deep. Scutellum with large, deep, clearly separated punctures. Metanotum reticulated, the

apical slope straight, oblique transverse. Pleuræ irregularly punctate, the punctures almost hid by longish white pubescence. Abdominal petiole strongly, irregularly punctured. Hind coxæ about two-and-a-half times longer than wide, densely covered with white longish pubescence. The abdominal petiole is not one quarter longer than the distance between its origin and the scutellum.

In the Bradley table (*l.c.*) this species comes near *E. pulcherrima*, Szép. and *longitarsis*, Kief.

Semæomyia guyanensis, sp.n.

Black, the antennal scape and the basal two joints of the flagellum rufous, the former brighter in tint, the basal half of the mandibles of a darker red colour ; legs black, the anterior, the middle trochanters and knees testaceous, as is also the base of the hind trochanters ; wings hyaline, the nervures black ; metasternal process short, not forked ; calcaria pale, the longer of the hinder one-third of the length of the metatarsus. Hind ocelli separated from each other by almost double the distance they are from the eyes. Male.

Length 4 m.m.

Antennæ stout, thickened towards the apex, the pedicle twice longer than wide, the third joint a little longer than the fourth. Malar space not much longer than the antennal pedicle. Front and vertex closely, distinctly, but not very strongly punctured. Temples short, the occiput transverse. Mesonotum and scutellum smooth and shining, the furrows wide, deep, smooth. Metanotum closely reticulated, the base above in front of the abdomen with a semi-circular area, opaque, aciculated ; the part at its apex shining, smooth ; the top of the apical slope is more oblique than the lower and larger part. Abdominal petiole smooth, shining, except for an opaque line on the basal two-thirds ; laterally it is deeply furrowed. The tibiæ are shortly spinose, the hinder metatarsus as long as the other joints united.

The genus *Semæomyia* was described by Mr. J. Chester Bradley in the Trans. Am. Ent. Soc. xxxiv, including only Neotropical species, among others *S. taschenbergi* Brad. *S. barticensis*, Bradley and *S. Kiefferi*, Brad., from British Guiana. In Mr. Bradley's table the species runs to *oculata* Szép. from Brazil and *ablata*, Schlett from Columbia.

ICHNEUMONIDÆ.

ICHNEUMONINI.

Stenichneumon ? watertoni, sp.n.

Black, the face, clypeus, mandibles, palpi, a narrow line of equal width on the inner orbits extending from near the ocelli to the antennæ, a line of the same width on the top of the eyes, a wider one on the lower two-thirds of the outer orbits, its upper third obliquely roundly narrowed, a line on the sides of the pronotum, its base roundly narrowed to a fine point, its apex projecting down to the tubercles, two narrow lines near the apex of the mesonotum in the centre, the sides and apex of the scutellum, post-scutellum, the lower edge of the

mesopleuræ, roundly incised above and the mesosternum, yellow; the sides of the metapleuræ and the apex of the metanotum yellow, tinged with rufous; the abdomen ferruginous, the post-petiole tinged with black, the petiole itself paler, more yellowish in tint. Four front legs red, paler in front, the coxæ and trochanters yellow, the apical three joints of the middle tarsi black, the hind legs bright red, the tibiæ paler, the tarsi yellowish; the apices of the tarsal joints spinose, wings hyaline, iridescent, the stigma and nervures black; the areolet five-angled, in front one-third of its width behind, the recurrent nervure received at the base of the apical third; the transverse median nervure received beyond the transverse basal; disco-cubital nervure unbroken. Pleuræ and metanotum densely covered with whitish pubescence. The 11th to 23rd antennal joints white. Basal three metanotal areæ confluent. Post-petiole rather strongly, closely punctured. Male.

Length 14 m.m.

Face and clypeus sparsely punctured in the middle, the sides smooth. Mesonotum closely, the scutellum more sparsely punctured; post-scutellum smooth. The metanotal areola finely rugose, bordered by a furrow; the lateral basal areæ strongly, but not closely punctured; the others finely, closely reticulated; the posterior median area smooth above; the posterior lateral coarsely, irregularly reticulated. Propleuræ smooth at the base, the rest finely punctured, the apex with a few striæ. Meso- and metapleuræ much more strongly punctured.

JOPPINI.

Microjoppa antennata, Fab.

Ichneumon antennata, Fab. Ent. Syst. ii, 158, 103.

Joppa antennata, Fab., Syst. Piez., 122, b; Brullé, Hymén. iv, 270, 1., Pl. 43, f. 1.

Microjoppa antennata, Kriechbaumer, Berl. Ent. Zeits., xliii, 53.

Microjoppa bimaculata, sp.n.

Luteous, the antennæ, the front except for a narrow line at the eyes, the vertex, occiput in the middle to the bottom, at the sides to the bottom of the lower third of the eyes, apex of mandibles, a mark of equal width on the base of the second abdominal segment, not reaching to the apex, a mark on the base of the third, its centre dilated to the apex, a large semi-circular spot on the fourth, reaching close to the apex, which is pallid yellow, the fifth except for a narrow yellow line on the apex and the whole of the sixth and seventh black. Legs coloured like the body; the apex of the hind femora, the base of the hind tibiæ more narrowly and the four hinder tarsi, black. Wings hyaline, tinged with yellow, the stigma and nervures black, the parastigma testaceous, the areolet oblique, four-angled, the recurrent nervure received near the base of the apical third; the transverse median beyond the transverse basal; disco-cubital broken by a distinct stump. Male.

Length 12 m.m.

Head, pro-and mesothorax smooth, the mesonotum thickly covered with short black pubescence; the metanotum smooth, the posterior median area closely covered with short, broken striæ, arranged in longitudinal rows above, in transverse ones below; the apical half of the apical lateral area with stout, broken mostly oblique striæ, the areola large, wider than long, rounded at the base, transverse at the apex. The basal three abdominal segments are strongly, closely, striated.

Microjoppa flavinervis, sp.n.

Luteous, the flagellum of antennæ, the vertex from the keel on occiput to opposite the anterior ocellus, the mark continued broadly down the middle of the front for more than half-way and roundly narrowed below, the teeth of mandibles, the mesonotum in front on either side of the furrows, the rest from near the apex of the furrows, the base of the metanotum to the middle of the areola, the first abdominal segment to the spiracles, the second and third to near the middle, the marks slightly narrowed to near the apex, the third with a semi-circular mark on the basal half, a similar mark on the basal three-fourths of the 4th and the whole of the fifth and sixth, black; legs similarly coloured, the hinder knees and tarsi black; wings yellowish hyaline to the parastigma, clearer hyaline beyond, the apex with a smoky cloud, commencing near the middle of the apical abscissa of the radius; the nervures and stigma luteous, the areolet five-angled, the nervures almost meeting in front; the disco-cubital nervure indistinctly broken by a stump. Female.

Length 13 m.m.

Smooth and shining, sparsely pilose, the metanotum with the pile longer. Areola horse-shaped, open at the apex, the bordering furrow clearly defined; the posterior median area shagreened on the top. The first, second and basal half of the third abdominal segments are closely striated.

Microjoppa basimacula, sp.n.

Luteous, the face except in the middle and the orbits pallid yellow, the antennæ, mandibular teeth, the mesonotum except round the edges, the base of metanotum to the middle of the areola, the base of first abdominal segment, the mark bifurcated at the apex, the base of the second except at the gastracoeli to near the middle, the mark obliquely narrowed at the apex and with the sides slightly dilated, the basal half of the third, the fourth to the middle at the sides, the middle roundly dilated, a semi-circular mark on the basal two-thirds of the fifth and all the others, black. Legs coloured like the body, the apical three joints of the middle and the whole of the hinder tarsi and the hind knees, black. Wings hyaline, clearly tinged with yellow to the stigma, the basal nervures luteous, the apical fuscous; a fuscous cloud in the apex, commencing shortly behind the middle of the apical abscissa of the radius; the areolet four-angled, receiving the recurrent nervure beyond the middle; the disco-cubital nervure broken by an incipient stump. Female.

Length 12 m.m. Male and Female.

Smooth and shining, the basal three segments of the abdomen closely striated, the striæ on the third finer on the apical half. Basal slope of the metanotum and the areola smooth; the others distinctly, but not very strongly punctured. The male has the head in front paler, more yellowish than it is in the female.

Microjoppa variamaculata, sp.n.

Luteous, the flagellum of antennæ, the vertex, a somewhat semi-circular mark in the centre of the upper half of the front, apex of mandibles, the upper half of occiput, a spot on the base of the second abdominal segment between them, curving round the apex of the gastracoeli and projecting beyond them as a semi-circle, not reaching quite to the apex, a semi-circular spot, not quite reaching to the apex, on the third, the fourth to near the apex, the mark rounded at the apex, and the whole of the following three segments, black, as is also the sheath of the ovipositor; the apices of the fifth obscure yellow. The head in front and the pleuræ are yellowish, there is a black line down the middle of the scutellum on the basal three-fourths. Legs coloured like the body, the apex of the hind femora, the base of the tibiæ more narrowly and the hind tarsi black, the apical three joints of the middle tarsi infuscated. The basal three abdominal segments striated, the striæ on the third extending to the apex and finer there. Wings hyaline, the base tinged with yellow, the stigma and nervures black, the apical nervures inclining to fuscous, the apex of the disco-cubital nervure, the transverse cubitals and the recurrent luteous; the areolet four-angled, receiving the recurrent nervure distinctly beyond the middle, the disco-cubital nervure broken by a minute, but distinct stump. Female.

Length 12 m.m.

Areolet clearly wider than long, the base almost transverse, with the sides rounded, the apex broadly rounded inwardly.

This species is very similar to *M. bimaculata* described above; that may easily be known from it by the black on the back of the head extending half way below the keel of the occiput and the front is entirely black, not the central part only, while the apex of the areola is angled inwardly, not broadly rounded.

Conopyge flavipes, sp.n.

Black, the 8th to 17th antennal joints white, the palpi and legs yellow, the coxæ and the apical two-thirds of the hind femora black, the second and third abdominal segments red, the following yellow, tinged with rufous; wings hyaline, the stigma and nervures black, the areolet five-angled, very little, narrowed in front, the recurrent nervure received near the apex, the disco-cubital nervure broken by a minute stump; the transverse median nervure almost interstitial. Female.

Length 13 m.m.

Head closely, almost uniformly punctured, except on the inner side of the outer orbits. Mandibles rufous to the base of the teeth, near which the red is tinged with yellow; there is a rufous spot on the malar space in front and another

in the centre of the face shortly below the middle. Propleuræ smooth, with seven longish keels running obliquely from near the top. Mesonotum closely, finely, but distinctly punctured, except beyond the middle where the punctures are large and scattered, as they are on the scutellum. Metanotum closely, strongly punctured, except the basal slope and areola which are smooth and the posterior median and lateral areæ which are strongly closely striated, the areola is twice longer than wide, widened and rounded at the base, the apex with a small smooth, raised, triangular area projecting from it. Post-petiole punctured at the base, the apex strongly striated, the middle bordered by stout keels; the second and third segments are closely, strongly punctured, more or less striated at the base, the punctures running more or less into each other; the other segments smooth. Head and thorax densely covered with white pubescence.

Joppa (Microjoppa) macrospila, sp.n.

Luteous, the flagellum of antennæ, mandibular teeth, the vertex, the black continued as a semi-circle down the middle of the upper half of the front, the upper half of the occiput, the mark widened at the eyes, mesonotum, scutellum, the basal third of the second abdominal segment, dilated between the gastrocoeli and roundly narrowed laterally at the apex, the middle slightly rounded inwardly; the third to shortly beyond the middle, the whole of the others, the hind coxæ, the apical half of the four front femora behind, of the apical all round, the black at the base widened below, and the hind tarsi, black. Wings hyaline, tinged with yellow at the base, the stigma and nervures black; the apex of both wings with a narrow fuscous border, the areolet shortly appendiculated, the recurrent nervure received before the middle; the fore half of it is broadly, roundly curved outwardly. Face strongly keeled laterally, the keel extending half-way down the clypeus; its lower half is widely depressed at the sides; the sides of the clypeus at the apex are broadly rounded. Scutellum strongly, longitudinally striated. Base of metanotum smooth, as is also the areola; the latter has the base rounded, the apex transverse; it becomes slightly, gradually narrowed from the lateral keels; the other areæ are transversely, irregularly striated; the basal lateral area with the basal half punctured. Apex of mesopleuræ crenulated, the striæ becoming wider below. Basal three abdominal segments strongly, closely striated; the black on the apical is tinged with violaceous; the gastrocoeli deep, strongly, roundly striated.

Macrojoppa parviceps, sp.n.

Rufous, the antennæ, front, vertex, outer orbits to the end of the eyes, base of pronotum narrowly, and the hind femora, tibiæ and tarsi black, the black on the femora tinged slightly with rufous; wings yellowish hyaline from the base to near the transverse median and transverse basal nervures, the rest fuscous violaceous, the stigma ochreous yellow; areolet four-angled, the nervures meeting in front, the recurrent nervure received at the base of the apical fourth, the discocubital roundly bent to the costa at the bend and with two minute stumps there; the transverse median nervure received shortly beyond the transverse basal; the post-petiole finely striated in the middle, the sides punctured, the second to fifth segments closely striated, the striæ on the posterior segments finer than on

the basal. The face, clypeus and malar space are yellowish ; the mandibles and palpi testaceous. Ma'le.

Length 18 m.m.

Hind legs very long, the tarsi densely covered with stiff black pile below ; the mesonotum and breast with short, the metanotum with longer white pubescence. Head and thorax smooth ; the metanotum on the sides from the basal to slope to near the apex finely punctured.

Pedinopelte violaceipennis, sp.n.

Black, the apex of mesothorax, including the postscutellum, the metathorax and the basal three segments of the abdomen red ; wings uniformly fuscous violaceous, the stigma and nervures black, the areolet oblique, four-angled, almost appendiculated, receiving the recurrent nervure almost in the middle ; the transverse median nervure received shortly beyond the transverse basal, the disco-cubital broadly roundly curved, broken by a minute stump before the middle. Male.

Length 17 m.m.

Head and thorax smooth and shining, the raised central part of the first abdominal segment and the middle of the second and third segments closely, distinctly longitudinally striated, the striae on the latter two and, more particularly, on the first stronger ; the transverse furrows deep, crenulated on the second, the first wider, smooth and with only a few striae. Gastrocoeli deep, transverse, the bottom on the inner side with a few striae. Malar space as long as the eyes. Head and thorax densely covered with short black pubescence ; the black on them has a violaceous hue, as have also the legs and, more particularly, the coxae and femora.

STIROJOPPA, gen. nov.

Scutellum roundly convex, the apex with an oblique slope, the basal slope stoutly keeled laterally. Post-scutellum margined at the sides and apex. Basal depression of metanotum wide and deep, the areola projecting into it ; the latter is obliquely narrowed at the base, flat and smooth, the centre slightly depressed ; from its outer edges a keel runs down to the top of the apical slope ; the basal lateral areæ are bounded at the top and sides by stout keels, the lateral ones becoming fainter towards the apex ; the apical areæ are not defined, beyond that the middle is depressed ; the spiracular area is bounded on the outer side by a keel ; there is a roundly curved keel on the lower part of the base of the metapleuræ. Post-petiole finely striated in the middle ; the second and third abdominal segments closely punctured. Labrum depressed. Front widely and deeply depressed. Temples wide, obliquely narrowed. Occiput deeply, widely depressed. An ennae dilated beyond the middle. Wings uniformly fuscous violaceous ; the areolet five-angled, narrowed in front ; disco-cubital nervure broken by a distinct stump ; the transverse median nervure interstitial. The sheath of the ovipositor largely projects.

Comes nearest to *Pedinopelte*, to which it has a considerable resemblance in form and colouration ; it may be known from it by the strongly keeled scutellum, by the more clearly defined areola and lateral areæ, by the four-angled areolet and interstitial transverse median nervure, and by the normal abdominal furrows.

Stirojoppa violaceipennis, sp.n.

Red, the antennæ, head, the apical half of the third and the whole of the following abdominal segments with the legs black ; the wings fuscous violaceous, the nervures and stigma black, the recurrent nervure received almost in the middle of the areolet, its posterior two-thirds rounded outwardly. Female.

Length 17 m.m.

Head, pro- and mesothorax and basal slope of metanotum smooth, the rest of metanotum closely, distinctly punctured, except the centre, which is smooth, and its sides which are strongly obliquely striated ; the basal part of the spiracular area is somewhat more strongly punctured, the apical strongly obliquely striated, the metapleuræ punctured, more closely and finely at the base than at the apex. Post-petiole finely closely striated in the middle, but not at the base and apex, the sides sparsely punctured, the second and third segments closely, regularly punctured ; the gastrocoeli smooth, large, wide, deep. Female.

Length 17 m.m.

The black on the apical abdominal segments has a distinct violaceous tint ; the metanotum and mesosternum are densely covered with white pubescence. Labrum dark red.

Rodwayia, gen. nov.

Metanotum closely, strongly transversely striated, except for two smooth, clearly defined areæ on either side at the base, there being between these, in the centre of the base, a small, wider than long area ; the outer area enclose the spiracles, which are linear ; the apex has a steep slope and has a short, wide tooth on the top at the outer edge. Labrum projecting. Scutellum roundly convex, the sides keeled to shortly beyond the middle. Areolet large, longer along the radius and cubitus than along the transverse nervures, which are parallel, the areolet being of equal width, five-angled, bluntly, indistinctly, so where the recurrent nervure is received ; disco-cubital nervure broken by a stump, the transverse median nervure received shortly beyond the transverse basal. Apex of clypeus rounded ; the labrum projecting. Abdomen smooth, the petiole slender, the post-petiole not separated ; the second segment finely, closely punctured, the ventral fold extending to the sixth segment. Antennæ longer than the body, serrate. Hind legs long.

This genus is not typical of any of the sub-tribes of *Ichneumoninæ* ; it differs from them in the large areolet, not narrowed in front and in the metanotum not being areolated, but strongly transversely striated. The form of the areolet is more like what it is in the *Cryptinæ* than in the *Ichneumoninæ*, but it wants the pleural and meso-otal furrows of the former group. Pending an inspection of the unknown female, I, for the present, refer it to the *Joppini*, with which it has some resemblance, although the depression at the base of the metanotum is not so deep, being more as in the *Ichneumonini*.

Rodwayia balteata, sp.n.

Yellow, the antennæ, tips of mandibles, the orbits behind the top of the eye, the middle of front and vertex, the latter behind, occiput, the mesonotum except narrowly at the base, the line projecting backwards shortly behind on either side of the middle, the scutellums, the basal half of the third abdominal segments, the whole of the fourth, fifth and sixth, the tarsi and the basal two-thirds of the hinder tibiæ, black. Wings hyaline, tinged with yellow, the apex with a cloud commencing near the apex of the basal third of the apical abscissa of the radius, and there is a narrower cloud in the apex of the hind wings, the stigma and nervures are black. Male.

Length 13 m.m.

Smooth and shining, except the transverse striæ on the metanotum, a few striæ on the apex of the metapleuræ and the post-scutellum, which is strongly longitudinally striated; the depression at the sides of the latter is strongly obliquely striated.

Rodwayia rufa, sp.n.

Ferruginous, the flagellum of antennæ, the mandibular teeth, the apical third of the hind tibiæ and the hind tarsi black; the face, clypeus, malar space, lower outer orbits and the inner narrowly below, pallid yellow, the palpi of a deeper yellow colour; the under sides of the basal joints of flagellum of a darker red; wings hyaline, the apex with a fuscous violaceous border, commencing shortly behind the middle of the apical abscissa of the radius; the costa, stigma and nervures black, the middle area on base of metanotum distinctly obliquely narrowed towards the apex; the part from the keel to the apical slope strongly, closely transversely striated; the top of the apex finely, irregularly longitudinally, the rest more closely and regularly transversely striated. Petiole smooth, the post-petiole with some weak scattered punctures, a fovea in the middle; the second and third segments finely, closely punctured, the others smooth, the first segment is of a brighter colour than the others. Male.

Length 13 m.m.

CRYPTINÆ MESOSTENINI.

Mesostenus guyanaensis, sp.n.

Black, the post-scutellum and the parts bounding it, apex of mesopleuræ narrowly in the upper half, widely on the lower, where the red extends to the middle and the whole of the metathorax red, the antennal scape, the greater part of the post-petiole, the apical third of the second abdominal segment, and the apical half of the third, yellow tinged with red; a line on the upper inner orbits, the clypeus, mandibles except the teeth, palpi, tegulæ, tubercles and scutellum, whitish yellow; the basal three or four joints of the flagellum brownish. Legs: the four anterior fulvous, the coxæ, trochanters and base of middle tibiæ whitish yellow, the femora more rufous in tint than the rest; the hind legs black, the femora broadly rufous in the middle, the base of the tibiæ, the apex of the basal joint of the tarsi and the whole of the second and third white wings hyaline, the apex with fuscous border, commenc-

ing at the apical fourth of the radial cellule ; the stigma and nervures black ; the areolet square, the apical nervure faint, but distinct, receiving the recurrent nervure shortly beyond the middle ; the transverse median nervure received very shortly behind the transverse basal, almost interstitial. Metanotum without an area at the base ; there is a distinct basal transverse keel and an indistinct one between the spines, which are short and broad ; the base is irregularly punctured near the keel ; the middle space is irregularly obliquely striated, the striæ closer on the outer side than in the middle ; the apical slope is more strongly obliquely striated ; the spiracles are twice longer than wide. There is a closely striated oblique band down the apical part of the mesopleuræ, the striæ longer and stronger above and below ; the metapleuræ closely, distinctly punctured.

Mesostenoides ornatipetiolatus, sp.n.

Black, the face, clypeus, labrum, palpi, the eye orbits broadly except for a black line near the top of the outer, a line on the prothorax near the base, slightly narrowed below on the pleuræ, a longish triangular spot on either side of the apex of the pronotum, two longish lines on the mesonotum along the furrow, turned outwardly at the base, where they are narrowed, tegulæ, scutellums, two curved transverse spots on the base of the metanotum, the spines, tubercles, a mark, longer than wide, oblique at the base and apex, a longer, slightly narrower one on the apical three-fourths below, its base rounded above, the apex obliquely narrowed following the line of the apical crenulated furrow, below with a short oblique branch running along the base of the sternal furrow, a large, oblique semi-circular mark, its base and apex shortly dilated, in the centre of the metapleuræ and a line on the apex of the first to seventh abdominal segments, yellow ; the first segment red except for the yellow apical line ; legs : the anterior yellow tinged with fulvous, the middle rufo-fulvous, the coxæ of both yellow in front, the hinder red, the coxæ with a yellow mark at the base above, the apical fourth of the femora more than the apical half of the tibiæ above, less than the half below and the tarsi black. Wings hyaline, the nervures and stigma black, the second transverse cubital nervure obsolete, the transverse median nervure interstitial. Male.

Length 12 m.m.

Antennæ shorter than the body, serrate, tapering towards the apex. Face strongly punctured, striated above, the clypeus finely and closely punctured, the front keeled, in the middle, the rest obliquely striated ; three or four oblique keels run down from between the ocelli. Mesonotum strongly punctured, the scutellum more sparsely and weakly so. Metanotum with two curved keels on the base, running to the outer end of the pleuræ past the spiracles ; the space enclosed by them longitudinally reticulated ; the rest is coarsely on the sides reticulated, in the depressed centre strongly transversely striated. Propleuræ finely punctured, the apex striated, the striæ longer in the middle. Mesonotum except in the middle closely, finely punctured, more closely above than below, the base and apex crenulated ; the sternal furrow strongly crenulated. Metapleuræ strongly reticulated. The second abdominal segment becomes gradually

widened towards the apex ; its sides at the base are widely depressed ; the petiole slender, the post-petiole not much widened.

Mesostenoides sibine, sp.n.

Black, the abdomen and legs red. the tibiæ and tarsi with the red tinged with yellow, the four front coxæ and trochanters yellow below, as is also the base of the anterior femora, the face, clypeus, labrum, a line round the eye orbits, that on the outer side widened below, a semi-circular mark on either side of the apex of the pronotum, a line on either side of the middle of the mesonotum, it curving round on the outer side of the base to the tegulæ, scutellums, two squarish marks on the base of the metanotum, the spines, a wide longitudinal mark on the upper side of the mesopleuræ, rounded at the base and apex and with an incision on the top shortly beyond the middle, a longer, narrower mark below, commencing farther back and with the apical half obliquely sloped, a mark below the hind wings, a wide longish mark on the upper part of the metapleuræ, its apex projecting below, the top with a shorter and thicker projection and two semi-circular spots on the apex of the post-petiole. The apex of the sixth and the base of the thirteenth antennal joints and the joints between them whitish yellow. Wings hyaline, the stigma and nervures black ; the areolet open at the apex, the transverse median nervure interstitial. Female.

Length 15 m.m. ; terebra 4 m.m.

Bred from the Limacodid moth, *Sibine trimacula*.

Pronotum and mesothorax closely punctured, the propleuræ, except at the base above, somewhat strongly longitudinally striated ; the scutellum smooth almost impunctate, its basal depression with four stout keels. The raised central part of the mesopleuræ is smooth below, the depression below it obliquely striated, smooth at the apex. Metanotum coarsely reticulated, the basal reticulations roundly curved, the apex closer and transverse ; the metapleuræ more finely, obliquely and closely striated, the striæ curved and twisted. Metanotal spines large, thick, conical, wider at the base than they are long. Abdomen smooth, the first segment gradually widened at the apex. Tibiæ and tarsi shortly spinose, the second joint of the hind tarsi white : the others absent.

Mesostenoides atriceps, sp.n.

Black, the abdomen and legs red, the tibiæ and tarsi paler, more fulvous coloured than the basal parts ; the following parts are whitish yellow ; the face, clypeus, a line on the inner orbits to the top of the occiput, where it is widened, a wider one on the lower three-fourths of the outer, widened below and extending to the bottom, leaving the malar space black, palpi, a broad line in the middle of the pronotum, tegulæ, a longish conical mark in the centre of the basal lobe of the mesonotum, a longish oval mark on the scutellar keels, scutellums, the keels at their sides, a longish wide line on the sides of the metanotum, commencing shortly beyond the keel and extending to the apex, a large line on the lower part of the propleuræ, the lower basal two-thirds becoming gradually widened below, the apex bluntly rounded, the tubercles, a large longitudinal mark on the lower

part of the mesopleuræ, the basal third becoming gradually narrowed obliquely below, its apex obliquely rounded, the usual conical mark behind the hind wing and a large, oblique oval mark on the apical two-thirds of the metapleuræ, yellow. Wings hyaline, the nervures and stigma black, the transverse median nervure received shortly behind the transverse basal. Female.

Length 13 m.m. ; terebra 2 m.m.

The 7th to 13th joints of the antennæ are white. The face and clypeus are strongly, but not closely punctured, the sides of the raised central part almost striated; the front strongly irregularly obliquely striated, a stronger keel runs down from the ocelli. Mesonotum somewhat strongly punctured, the punctures closer round the furrows, which are crenulated. Base of metanotum sparsely, not very strongly, punctured; there are two keels down the centre; the top in the centre beyond the keel is finely obliquely striated, the striæ converging between the spines; the rest strongly, not closely, transversely striated. Metapleuræ strongly obliquely striated, the striæ on the apical part more oblique, stronger and more widely separated than they are on the base. There is a Y-shaped striated space on the propleuræ. Mesapleuræ irregularly, obliquely striated below the tubercles; the basal part finely punctured; the apex crenulated; the depression on metapleuræ more widely so.

Mesostenoides unilineatus, sp.n.

Black, the palpi, tubercles, metanotal spines and a band, narrowed in the middle white, a brownish line on the sides of the petiole at the apex; the anterior legs obscure testaceous, their coxæ black to near the apex, the top of the femora and the tarsi infuscated, the middle coxæ, basal joint of the trochanters bright, the femora of a darker red, the apex of the femora narrowly and the hind tibiæ and tarsi black; the hind legs black, the coxæ and basal joint of trochanters red, the femora dark red at the base; the apical half of the basal joint of the hind tarsi and the second, third and fourth joints white. Wings hyaline, the stigma and apical nervures fuscous, the basal black, the areolet small, square, the transverse basal nervure interstitial. Female.

Length 10 m.m. ; terebra, 2. m.m.

Opaque, alutaceous, the metanotum finely, closely reticulated, the apical slope transversely in the middle, the sides more strongly obliquely striated. Propleural furrow striated, the apex with a narrower striated belt; the mesopleura finely, closely obliquely, striated, the striæ more or less intertwining and becoming stronger towards the apex on the upper apical half; the metapleuræ similarly, but somewhat more strongly striated. Mesosternal furrow widened towards the apex, strongly crenulated.

Mesostenoides cratodontus, sp.n.

Black, the face, clypeus, labrum, palpi, basal third of mandibles, the eye orbits all round, the line widened on the outer side below, a line on the pronotum, tegulæ, a triangular mark on the apex of the middle lobe of mesonotum, tegulæ, the scutellums, the metanotal teeth, a line, widened at the apex, on the lower

part of the propleuræ, tubercles, a large wide line on the apical three-fourths of the mesopleuræ, transverse above, becoming gradually widened from the base to the apical third, then narrowed, the apex thicker than the base, the usual mark below the hind wings, a large mark, almost filling the space, on the metapleuræ, dilated at the base above, the apex becoming obliquely widened from the bottom to the top, the post-petiole except at the base, the black there trilobate, and the apices of all the segments, and the ventral segments, lemon-yellow; the line on the penultimate much widened at the sides as is also that on the last, the line on it being much narrowed in the centre. Legs red, the apical two joints of the tarsi black, the four front coxæ and trochanters, the hind coxæ broadly at the base above, yellow; the apical two joints of the tarsi black; the hinder tarsi white. Wings hyaline, the nervures and stigma black, the transverse median nervure, received behind the transverse basal. Female.

Length 10 m.m. ; terebra 3 m.m.

The apex of the 6th and the 7th to 13th antennal joints white. Face closely, the clypeus sparsely punctured. Front irregularly reticulated, striated above, the depressed lower part finely, closely transversely striated. The apical third of the mesonotum is finely, closely longitudinally striated; the furrows are more strongly, widely striated, the striæ oblique and clearly separated. Scutellums impunctate. Metanotum aciculated in the centre of the basal part and with a shallow depression which becomes widened towards the apex, the outer part irregularly, obliquely striated; the rest strongly, irregularly reticulated above, transversely striated on the apical slope; the teeth are large, bluntly conical, widened at the base, longer than wide and than the projecting part, which is longer on the outer than on the inner side. The top of the propleuræ at the base and apex and the lower part are striated; there is a finely striated oblique band on the mesopleuræ; the metapleuræ smooth above, the base punctured, the rest irregularly obliquely striated. Abdomen smooth, shining, the second segment opaque, aciculated.

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Polyaenus spilonotus, sp.n.

Black, shining, the face, clypeus, the inner orbits to the end of the vertex, the outer on the lower two-thirds, the line extending to the lower edge of the malar space on the outer side, palpi, a line, narrowed on the basal end below on the centre of the pronotum, on the sides; a spot, longer than wide, of equal width, on the apex of the middle lobe of the mesonotum, the keels at the base of the scutellum, the scutellums, the narrow keels running out from them, the metanotal spines, a line running down from them, its apex obliquely narrowed on the outerside below, two narrow lines on the centre of the base of the pronotum, a longish mark, narrowed above, on the lower basal half of the propleuræ, tubercles, a large longish mark, gradually narrowed above from the base to the apex, the mesosternum, the usual mark behind the hind wings, and a squarish mark, but slightly narrowed behind, on the metapleuræ, yellow, the abdomen rufo-testaceous, darker towards the apex, the legs of a brighter red colour, the tarsi slightly paler, more yellowish in tint. Wings hyaline, the stigma and nervures black,

the areolet minute, longer than wide, the recurrent nervure interstitial with the second transverse cubital nervure; the transverse median nervure received shortly before the transverse basal. Male.

Length 10 m.m.

Frontal spines, broad, the two united on the lower half, the upper two separated by a triangular space; two keels run down to them from the ocelli. Face closely, strongly, the clypeus sparsely punctured, middle lobe of mesonotum distinctly, but not strongly punctured and densely covered with black pubescence. The basal region of the metanotum has two fine keels down the middle, with some stronger transverse striæ between them; the part bordering this is smooth, bordered on the outer side by some reticulations, followed by two or three fine transverse keels; the lower, outer edge is depressed; the part between the keel and the spines is transversely reticulated; the apical slope more finely (but still strongly) transversely striated. Propleuræ with the apex and the lower central part striated; there is a broad striated band on the mesopleuræ below the tubercles. Metapleuræ smooth at the base, the rest strongly punctured, with some striæ near the smooth part, the spines are prominent, wider at the base than they are long. The spiracles on the first abdominal segment are more prominent; more projecting than usual.

Polyaenus fusciventris, sp.n.

Black, the abdomen fuscous, the post-petiole and the basal half of the second abdominal segment, black; the face, clypeus except at the apex, a narrow line on the inner orbits extending on to the top of the outer, a broad line on the lower half of the lower, extending on to the malar space, its upper half obliquely narrowed, basal half of mandibles, palpi, a line on the centre of the sides of the pronotum, a wider one, widened towards the apex, on the lower edge of the propleuræ, a wide conical spot on the apex of the middle lobe of the mesonotum, a large semi-circular spot on the apex of the scutellum, the scutellar keels, post-scutellum, the metanotal spines and a line leading down from them to the apex, tubercles, a large line along the lower part of the mesopleuræ, the base projecting above and not reaching to the lower part of the main line, which has the basal fourth wider than the rest and is obliquely sloped; from it the mark becomes narrowed towards the apex, with a slight rounded curve beyond the base; the lower part is straight; there is the usual mark behind the hind wings, but none on the metapleuræ. Four front legs pallid yellow, the fore coxæ black, the middle reddish behind, the fore femora blackish behind, the middle entirely black; the hind legs very long, the coxæ, trochanters and femora red; the tibiæ and tarsi yellowish white, the apex of the femora and the base of the tibiæ blackish. Wings hyaline, the stigma and nervures black; the transverse median nervure received behind the transverse basal; the areolet minute, narrowed at the base, longish, receiving the recurrent nervure in the apex. Male.

Length 13 m.m.

Upper half of face strongly punctured, but not closely, the upper half of the clypeus with scattered punctures. Front deeply hollowed, obliquely, sparsely

striated above, the spines long and sharp-pointed. Prothorax smooth except for some curved striæ in the middle of the apex of the pleuræ. Mesonotum finely, distinctly, but not closely punctured, the apex of the lateral lobes smooth, as are also the scutellums. Base of metanotum smooth, with two keels down the centre of the apical half. The basal half of the central half obliquely, the apical more transversely, strongly striated; the apical slope is closely, regularly transversely striated. Meso- and metapleuræ smooth, densely covered with white pubescence. The 11th to 20th antennal joints white, tinged slightly with rufous.

Polycyrtus nigriventris, sp.n.

Ferruginous, the antennæ, head and abdomen from the post-petiole black, the clypeus, mandibles, labrum lower side of malar space, the palpi, and the 8th to 14th antennal joints, white, wings hyaline, the stigma and nervures black, the areolet a little longer than wide, slightly narrowed at the base, the recurrent nervure received in the apical fourth, the transverse median nervure interstitial.

Female.

Length 13 m.m. ; terebra 2 m.m.

Smooth and shining. Frontal spine longish conical, testaceous at the apex. Metanotal spines, conical, not very stout, longer than they are wide at the base.

The apical slope of the metanotum bears four irregular keels. The base and apex of the post-petiole, the gastroevoli and the apex of the second segment narrowly are dark rufous. The second and following abdominal segments are covered with short white hair. Four stout short keels lead down from the ocelli, the central two straight, the outer oblique.

A longish slender species.

Polycyrtus melanocephalus, sp.n.

Ferruginous, the head entirely black, the palpi white, the antennæ black, the scape pale rufous below, the 8th to 16th joints white they are shortly and densely pilose; the mesonotum and apical segments of the abdomen are slightly darker coloured, wings hyaline, the stigma, costa and nervures testaceous, the stigma paler coloured, the areolet small, a little longer than wide, of equal width, receiving the recurrent nervure near the apex; the transverse median nervure interstitial. Female.

Length 8 m.m. ; ovipositor 2 m.m.

Ida Sabina on the Berbice River. August. Smooth, shining. Metanotum and base of legs sparsely covered with fuscous hair. The hind tibiæ paler coloured than the femora, their tibiæ pale yellow, sparsely, shortly spinose below. Metanotal spines of moderate size, conical, a little longer than they are wide at the base.

Polycyrtus albolineatus, sp. n.

Ferruginous, the antennæ, mandibles, the vertex, front, broadly, the occiput still more broadly, prothorax, mesonotum and scutellum black; the face, clypeus, labrum, palpi, a line on the inner orbits, round the top to the bottom of the outer

and the malar space, the line on the outer extending to the outer edge on the lower half, a broad line, narrowed at top and bottom, not reaching above to the pronotum, a slightly narrower line on the sides of the pronotum, not reaching to the base or apex, tegulæ, a line along the inner basal part of the lateral mesonotal lobes, the scutellar keels, the scutellums except a mark, rounded at the apex on the base of the scutellum, tubercles, a line leading down to them, broad above, narrowed below, and a narrow line on the apex of the mesopleuræ, white, legs coloured like the body, but slightly paler; the wings hyaline, the stigma and nervures black, the areolet double the length of the first transverse cubital nervure, widened at the apex, receiving the recurrent nervure near the apex; the transverse median nervure received shortly behind the transverse basal. Female.

Length 9 m.m.; terebra 3 m.m.

Antennæ stout, as long as the body, the 6th to 13th joints white. Entirely smooth and shining. Front spine stout, conical, not quite twice longer than it is wide at the base; there is a short rounded tubercle-like projection immediately above it. Metanotal spines large, broad at the base, slightly curved. The lower half of the propleuræ is finely, closely striated, the meso- and metapleuræ sparsely, weakly punctured. The hind tarsi are paler, more yellowish in colour than the others and are closely spinose.

The male is similarly coloured; the antennæ are longer and have the white band longer; they are closely densely covered with short, black stiff pubescence. In both sexes the abdomen is slightly infuscated on the apical half. In the male the top of the frontal spine is black.

Cryptanura interrupta, sp. n.

Black, the abdomen and legs red, the palpi, a mark on the base of the mandibles, a squarish spot on the middle of the clypeus, the inner orbits the line continued to the top of the outer, a line, narrowed at the apex, on the pronotum, tegulæ, scutellum, metanotal spines, a line round the base of the prothorax, tubercles the usual large spot at the hind wings, a short line on the lower, apical part of the mesopleuræ, a conical spot in the middle of the apex of the metapleuræ, a wide line on the apex of the first abdominal segment, a narrower, interrupted one on the second and the whole of the penultimate, white; the legs coloured like the body, the fourth anterior coxæ and a band, shorter than the spurs, white. Wings hyaline, the stigma and nervures black, the parastigma white, the areolet small, squarish, the first transverse cubital nervure oblique, the recurrent nervure received before the middle; a triangular cloud along the outer side of the transverse basal and transverse median nervures, but extending inside the former in front, and a cloud at the apex, commencing near the base of the apical third of the radius and extending to its apex; it has the outer side more irregular in outline, becomes gradually narrowed and reaches almost to the end of the discoidal cellule; the transverse median nervure received shortly behind the transverse basal. Female.

Length 7 m.m.; terebra 2 m.m.

Aciculated above, the rest striated. Mesopleuræ with the base finely, closely striated, the striæ stronger at the base, a broad, striated strongly, band on the upper half; the apex crenulated, the rest finely rugose. Metapleuræ finely, closely punctured. Legs densely covered with white pubescence.

Cryptanura fasciatiipennis, sp.n.

Black, the palpi, tegulæ, tubercles and metanotal spines whitish yellow, the apices of the basal three abdominal segments broadly white, tinged with testaceous, the last segment white; the forelegs testaceous, their tibiæ behind and at the base all round white, the middle pair black, the femora rufo-testaceous, the tibiæ with a broad white basal band, the hind legs black, except for a white basal band on the tibiæ; all the calcaria white; the wings hyaline, a smoky cloud beyond the transverse median nervure and extending to the bend of the discocubital nervure, reaching close to the top part of the transverse basal nervure but not going beyond that; there is a cloud in the apex, which commences at the middle of the apical abscissa of the radius; the recurrent nervure is received in the middle of the areolet, which is angled there; the apical nervure is very faint; the transverse median nervure is received shortly beyond the transverse basal. Face, pleuræ, metanotum and coxæ densely covered with white pubescence.

Female.

Length 7 m.m.

Vertex shining, the front more opaque, aciculated weakly so below. Face opaque, finely, closely punctured, not separated from the clypeus, which is more sparsely punctured. Mesonotum opaque, alutaceous, the furrows shallow, but distinct. Base of metanotum opaque, alutaceous, obscurely striated on the outside, the part between the keel and the spines irregularly obliquely striated, the apical slope more strongly longitudinally reticulated. Propleuræ striated below and more narrowly at the apex above. Mesopleuræ and sternum closely, finely punctured, except at the apex above, where it is smooth and shining; the part in front of the smooth space striated; the metapleuræ more strongly and regularly punctured.

Cryptanura curtispina, sp.n.

Black, the inner orbits, the line extended to the upper part of the outer, the lower fourth of the outer, the line gradually widened below and extended to the malar space and the clypeus, the face, except for a mark in the centre of the lower half, the mark narrowed above and extending along the upper side of the clypeus, mandibles except the teeth, palpi, a line round the base of the prothorax, a narrower one on the apical half of the pronotum, tegulæ, scutellum, a large triangular mark behind the hind wings, metanotal spines, a mark, twice longer than wide, on the apical half of the metapleuræ, whitish yellow; the apices of the basal three abdominal segments yellow, tinged with rufous, the fourth segment rufous, the apical whitish yellow. Four front legs pallid yellow, the base of the middle tibiæ paler; the hind legs rufous, the tibiæ darker coloured, especially towards the apex, their base with a white band, the basal joint of the trochanters and the apex of the femora narrowly black, the tibiæ, white, the basal two-thirds of the

first and the apical black. Wings hyaline, the stigma and nervures black, the apical nervures fuscous, the areolet square, its apical nervure faint, the recurrent nervure received in the middle, the transverse median nervure interstitial.

Male.

Length 4 m.m.

The underside of the antennal scape yellow, of the flagelloid fuscous. Face sparsely punctured. Mesonotum opaque, closely, finely punctured. Base of metanotum opaque and closely punctured; the part behind the keel finely longitudinally striated at the base, the striæ roundly curved in the centre, the apical slope more closely, strongly and regularly striated. Propleuræ smooth. Mesopleuræ closely, regularly and distinctly longitudinally striated; the metapleuræ more strongly obliquely so. The tarsi are closely, shortly spinose.

Cryptanura cinctipes, sp.n.

Black, the abdomen and legs red, the sixth to twelfth joints of the antennæ except above, palpi, a spot in the middle of the clypeus, rounded above, transverse below, a line on the inner and upper eye orbits, half the width of the space between the ocelli and the eyes, a small spot, roundly narrowed below, on the malar space, a line round the base of the prothorax, a wider one on the sides of the pronotum, tegulæ, tubercles, scutellum, the usual spot behind the posterior wings, metanotal spines, a line on the apical three-fourths of the lower part of the mesopleuræ, its upper basal two-thirds widened above, the base oblique, the apex rounded, a more obscure line along the lower part of the furrow on the breast, a conical mark, twice longer than wide, on the lower apical part of the metapleuræ, a broad continuous line on the apex of the first, second and seventh, a narrower line on the sides of the third and the fourth anterior coxæ, whitish yellow, the sixth and apical abdominal segments blackish; wings hyaline, the stigma and nervures black, the parastigma white; a cloud beyond and touching the transverse median and transverse basal nervures, not reaching to the costa and extending in front to the innerside of the latter nervure, its outer side paler, irregular and becoming gradually wider towards the posterior end, and an irregular apical cloud, commencing near the apex of the apical two-thirds of the apical abscissa of the radius, reaching to the apex of the radial cellule, straight on the inner side, roundly irregularly narrowed on the outer; the transverse median nervure received shortly behind the transverse basal; the areolet slightly narrowed and open in front, the recurrent nervure received shortly before the middle. Female.

Length 8 m.m.; ovipositor 2 m.m.

Cryptanura albispina, sp.n.

Head and thorax rufous, the under side of the antennal scape, tegulæ and spines white, the latter of a clearer white, the flagellum black, the underside of the 7th to 13th-14th-joints white; abdomen black, the base and apex of the first, the apex of the second and third broadly—the apical fourth of the second and the third of the latter—and the sixth and seventh entirely with the ventral

surface, testaceous ; wings hyaline, the stigma and costa black, the nervures of a paler black ; the areolet small, open at the apex, the transverse cubital nervure obliquely slope, the transverse median received shortly behind the transverse basal. Female.

Length 8 ; terebra 1 m.m.

Face shagreened, the clypeus, except on the apical slope, closely distinctly punctured. Front somewhat strongly, obliquely striated, the striæ beginning at the hinder ocelli ; a strong keel runs down the middle from the ocelli, mesonotum strongly shagreened, the apex in the middle strongly, irregularly longitudinally striated, scutellum smooth, shining. The two basal parts of the metanotum longitudinally striated, the basal part more finely than the second ; in both the striæ almost form reticulations, the apical slope is more strongly transversely striated ; the sides from the spiracles, are closely oblique, rather strongly striated. Legs pallid testaceous, the middle coxæ and the femora behind fuscous ; the hind legs with the coxæ pallid testaceous, a large dark mark, roundly incised at the base, on the outer and lowerside, the trochanters fuscous, the femora testaceous, broadly fuscous above, the tibiæ black, the apex with a white band as long as the hind spurs ; the tarsi white, the first joint narrowly at the base and the last dark rufous ; the four front legs white, the hinder black. The metanotal spines are large, longer than they are wide at the base and curved.

Cryptanura ornatipennis, sp.n.

Black, the thorax red, the prosternum black, the mandibles to the base of the teeth, palpi, a line on the upper inner orbits, dilated at the top of the front and extending to the hinder ocelli, a line round the base of the pronotum, tegulæ, tubercles, scutellum to the top of the apical slope, metanotal spines, broad bands on the apices of the basal three abdominal segments, a narrow one, not reaching to the outer edge, on the sixth and the whole of the seventh, white ; legs rufo-testaceous the hinder darker coloured, the four anterior coxæ white, the basal joint of the four front trochanters black, the tarsi infuscated, the base of the middle tibiæ with a white band on the base ; the hind coxæ and trochanters black, the former with a broad oblique band on the inner side above, the femora darker coloured below and black at the apex, the tibiæ and tarsi black, the former with a whitering, nearly as long as the long spur of the hinder calcaria ; the tibiæ closely spinose. Wings hyaline, the stigma and nervures black, a fuscous triangular cloud on the outer side of the transverse basal and transverse median nervures and a wider one at the apex, commencing shortly behind the middle of the apical abscissa of the radius ; areolet open at the apex, narrower there than at the base, receiving the recurrent nervure at an angle in the middle. Female.

Length 7 m.m. ; ovipositor 2 m.m.

Face thickly covered with white pubescence, finely striated in the middle above ; the clypeus weakly sparsely punctured, its apex rufo-testaceous. The part at and below the ocelli weakly, irregularly obliquely striated. Mesonotum finely, closely punctured, the scutellum smooth. The metanotum round the basal slope finely punctured, the rest obliquely striated, the outer part with the striæ

finer, closely and less distinct than they are in the middle ; the rest is strongly closely striated, the striæ more or less twisted, the outer more regularly so than the central, which are oblique and converge towards the centre ; those on the apical slope are stronger and more distinctly and regularly twisted. Upper third of propleuræ closely punctured, the rest strongly striated. Mesopleuræ finely, closely punctured except at the apex above, this part having its base bordered by fine striæ ; the metapleuræ are more strongly punctured. Abdomen smooth.

Glodianus pallidiceps, sp.n.

Head, thorax and basal half of abdominal petiole red, the rest of abdomen black, with white lines on the apices of the basal five abdominal segments, above, the line on the first wider than the others and with the middle of the base dilated, its sides rounded, the line on the second shorter than the others, separated from the outer edge by half its length, its base dilated triangularly in the middle, the other lines are of equal width ; the sides of the second and following segments are white on the lower edge, the line becoming gradually wider to the fifth, that on the apical third still wider, but of equal width. The face, clypeus, labrum and mandibles are pallid yellow, the outer orbits have the rufous tint paler than it is on the vertex. Antennæ black, the scape red, the 8th to 14th joints white except above ; the joints are thickened and compressed beyond the middle, attenuated at the apex. Legs : the four front legs, the hinder coxæ and the basal joint of the trochanters on the inner side, coloured like the body, the rest of the hind legs black, except the apical half of the basal tarsal joint and the whole of the second, third and fourth which are white. Wings hyaline, the nervures and stigma black ; the areolet slightly longer along the longitudinal than along the transverse nervures, and of equal width, the second transverse cubital nervure bullated behind. Female.

Length 16 m.m. ; terebra, 17 m.m.

There is a flattened, distinct spine, rounded and narrowed above, in the middle of the front. Face roundly raised in the centre, finely, closely punctured, the sides of the raised part obscurely striated. Clypeus roundly convex, separated from the face. Labrum projecting. Parapsidal furrows stoutly, widely striated ; the apex of the mesonotum with fine, close, rounded striæ. Scutellums smooth, shining. Base of metanotum to the keel smooth, the rest closely, strongly regularly striated, with a short, stronger stria or keel on the sides of the top of apical slope. Propleuræ smooth, with three stout oblique striæ on the top in the centre. The raised upper part of the mesopleuræ smooth, the rest closely, finely punctured, obliquely finely striated below the middle of the smooth part. Metapleuræ closely, obliquely striated, strongly above, weaker below, the base smooth. Abdomen smooth ; the black on it is tinged with blue.

Glodianus lissonotus, sp.n.

Ferruginous, the face, clypeus, labrum and mandibles pallid yellow ; the post-petiole and the following abdominal segments black, the apex of the second to fifth segment with a band rounded at the base, the following two with narrow lines and the second and following ventral segments pallid yellow ; the four front

legs and the hind coxæ and basal joint of the trochanters coloured like the thorax, the hind femora black streaked with dark rufous, the tibiæ and almost the basal half of the tarsi black, the rest of the tarsi white; antennæ black, the scape rufous, the tenth to thirteenth joints white. Wings hyaline, the nervures and stigma black; the areolet of equal width, a little longer along the longitudinal than along the transverse nervures, the recurrent nervure received near the apex; the transverse median nervure received shortly before the transverse basal. Female.

Length 16 m.m.; terebra 11 m.m.

Head smooth, a narrow keel runs down from the ocelli. Pro- and mesothorax smooth; the furrows not striated. Base of metanotum smooth, the rest transversely striated, the striæ weaker at the base. Apical half of metapleuræ finely striated below.

Glodianus ornatitarsis, sp.n.

Ferruginous, the back of the second and following abdominal segments infuscated, the face and clypeus paler, more yellowish in tint; the flagellum of antennæ, the hind trochanters, femora, tibiæ and the tarsi except the apical two-thirds of the second joint and the third and fourth (which are white) black; wings hyaline, the nervures and stigma black, the areolet small, square, open at the apex, receiving the recurrent nervure at the apex; the transverse median nervure interstitial. Male.

Length 12 m.m.

Head below the ocelli strongly obliquely striated, the lower part of the front more transversely so. The sides of the face irregularly transversely striated, the centre raised and smooth above. Clypeus finely sparsely punctured. There is a distinct keel down the middle of the depressed lower part of the front. Mesonotum strongly, closely punctured, the inner sides of the lateral lobes striated, the apex of the central stoutly, obliquely striated, the striæ clearly separated, roundly curved at the base. Scutellum roundly convex, smooth, the sides at the base and apex keeled. Metanotum with a semi-circular area on either side at the base, the inner side strongly obliquely striated; the spiracles are bounded on the inner side by a semi-circular keel; the basal part between the areas is bounded by a semi-circular keel; the base of the apical part at the area is obliquely stoutly striated, the rest is strongly transversely striated, more strongly on the sides than in the centre. Propleuræ finely punctured, the centre strongly striated, the central striæ extending from the base to the apex, the others on apex only. Mesopleuræ finely, not very closely punctured, except for a large smooth space on the upper apical part; there are some striæ on the upper basal corner; the apex crenulated. Metapleuræ strongly obliquely striated; the spines large, becoming gradually widened.

Glodianus xanthostomus, sp.n.

Head, thorax, antennal scape, first abdominal segment, the four front legs, the hind coxæ, trochanters and base of femora narrowly ferruginous, the face, clypeus, labrum, mandibles, except the teeth, palpi, a narrow line on the lower half of

the inner orbits and the malar space, pallid yellow; the flagellum of antennæ black, serrate, the joints clearly separated below, densely covered with stiff black pubescence; wings hyaline, the nervures and stigma black, the areolet of equal width, a little longer along the longitudinal than along the transverse nervures, the transverse median nervure interstitial. The frontal keel rounded above at the apex, the base obliquely depressed, the slope longish, the apex has a steep slightly oblique slope. Male.

Length 13 m.m.

Face closely, strongly punctured, the clypeus more sparsely so; the front and vertex smooth. Mesonotum sparsely punctured in the middle, the furrows strongly, widely transversely striated. Scutellum smooth, the sides stoutly keeled; the post-scutellum largely bifurcate at the base. Base of metanotum smooth, its centre depressed, narrowed towards its apex; the apical part is narrower, not distinctly margined like the basal; the transverse basal keel is roundly turned towards it; the centre of the metanotum is strongly transversely striated, the striæ at the sides curved; at the apex they are roundly curved; there is a strong keel on the sides on the top of apical slope.

Glodianus pallidipalpis, sp.n.

Head, thorax and basal half of the first abdominal segment ferruginous, the rest of the abdomen black, tinged with blue, the four front legs and the hind coxæ, trochanters and extreme base of femora coloured like the body, the rest of the hind femora, the tibiæ and the basal joint of the tarsi to near the apex black, the apex of the first tarsal joint and all of the others white, except that the apices of the joints are darker coloured. Clypeus, labrum and mandibles except the teeth and the palpi pallid yellow. Antennæ black, the eighth to twelfth joints white. Wings hyaline, the nervures and stigma black, the areolet larger, longer than usual, narrowed behind, distinctly longer along the longitudinal than along the transverse nervures, the recurrent nervure received near the base of the apical third; transverse median nervure interstitial. Front with a longitudinal keel down the centre of the middle region; the lower depressions finely, closely striated. Female.

Length 23 m.m.; terebra 7 m.m.

Parapsidal furrows obsolete. Base of the metanotum in the centre transversely striated, the rest closely covered with fine roundly curved striæ; the more strongly striated apical part is not bounded at the base by a keel; the striæ are more or less roundly curved; the sides at the top of the apical slope bear broad, rounded, short spines. Prothorax at the base above striated, the apex of the propleuræ with an irregularly striated border. Mesopleuræ granular, a broad, oblique striated band down the middle. Metapleuræ regularly somewhat strongly obliquely striated. Tarsi closely, strongly spinose.

This species is not typical; there are no furrows on the mesonotum, the base of the metanotum is not smooth, the areolet is larger, longer and distinctly narrowed behind and the tarsi are much more thickly spinose.

PIMPLIDÆ.

PIMPLINÆ.

Epimeces latifasciatus, sp.n.

Rufo testaceous, the antennæ, head, hind legs and the apices of the basal three abdominal segments, the sides of the second and third broadly and all the others, black; wings fuscous, the base to the transverse band and median nervures and a band, extending from the para-stigma to the apex of the stigma, yellowish hyaline; the hind wings yellowish hyaline to near the middle, fuscous on the rest; the stigma yellowish testaceous, clypeus and mandibles rufo-testaceous; the palpi pale testaceous. Female.

Length 24 m. m.; terebra 7 m.m.

Smooth and shining, densely covered with whitish pubescence, black on the hind legs and on the apical abdominal segments on which it is longer and denser than on the basal. The second abdominal segment is flat, longish pyriform. The transverse cubital nervure is slightly shorter than the space between it and the recurrent.

This species has the general colouration of *E. tibialis*, Cam.; that species is much smaller, the colour is paler and the basal four abdominal segments are devoid of black.

Epimeces fuscipennis, sp.n.

Rufo-testaceous, the antennæ, head except the oral region, the apices of the basal second, third and fourth abdominal segments from the end of the raised central part, the fifth and sixth broadly in the middle of the base, their apices and the whole of the apical, black; legs coloured like the body, the hinder femora dark fuscous, the tibiæ and tarsi black, the base of the tibiæ with a pale testaceous band. Wings uniformly fuscous, the stigma and nervures fuscous, the transverse cubital nervure short, half the length of the space between it and the recurrent. Male.

Length 11 m.m.

The apical half of the clypeus rufo-testaceous, the labrum mandibles except the teeth and the palpi of a paler, more yellowish colour. Smooth and shining. The sides of the central, basal part of the first abdominal segments are stoutly keeled; the second to fourth are depressed in the middle on the basal half, the sides roundly raised. The hind coxæ have the sides and lower surface broadly infuscated.

Odontopimpla armatipes, sp.n.

Black, the basal four abdominal segments, the sides of the fifth and sixth and the hind legs red, the hind coxæ black, the apical fourth of the tibiæ and the hind tars of a lighter black colour, the four front legs rufo-testaceous, the anterior coxæ with almost the basal half and the middle to near the apex, black; the clypeus, a line on the lower half of the inner orbits the palpi and tegulæ pallid

yellow; wings yellowish hyaline, the nervures yellow, black in the clouded parts, the stigma black; a cloud extends from the para-stigma to the apex of the stigma and to the opposite side of the wings, narrowed on the outerside from the disco-cubital nervure, a wider, fainter cloud in the apex of both wings, the areolet oblique, almost appendiculated, the apical nervure double the length of the first, the recurrent nervure received in the apical fourth. Female.

Length 17 m.m.; terebra 9 m.m.

Smooth and shining, covered closely with white pubescence, which is longer on the clypeus and median segment; the pubescence on the legs closer and shorter. The basal depression on the first abdominal segment is strongly keeled laterally; there is a longish ovoid depression down the basal half of the second; it is strongly but not closely punctured. Sheath of ovipositor thickly covered with stiff black pubescence. The femoral tooth is broad, bluntly rounded at the end, longer on the basal than on the apical side. The apices of the scutellums are narrowly deep blood-red.

Neotheronia erythrea, sp.n.

Ferruginous, darker coloured on the apical half of the abdomen, the head except above, and the pleuræ, paler, more yellowish; the hind legs coloured like the body, with the tarsi black, the four anterior paler, more testaceous in colour, the base still paler, more yellowish in tint, the antennal scape black, the scape testaceous, darker above, the base of flagellum brownish; wings hyaline, the stigma and nervures black, the apex from the base of the apical half of the radius fuscous violaceous, the areolet four-angled, the recurrent nervure received in the apical fourth; it has a longish nervure on the outerside of the middle, the transverse median nervure interstitial. Female.

Length 12 m.m.; terebra 2 m.m.

Smooth, shining, the mesonotum densely covered with short black pubescence, the face more sparsely with longer white pubescence. Clypeus separated from the face by a distinct furrow, which is transverse in the middle above, the sides roundly curved downwards. Malar space about one-half the length of the pedicel of the antennæ. Metanotum with a stout curved keel at the top of the apical slope; there is another on the apex; there is a longish conical fovea on the top of the basal half, its sides distinctly margined; there are no lateral keels. Scutellum with the sides keeled on basal third. Abdominal petiole nearly four times as long as wide; an oblique depression on either side near the apex. Mandibles, pale yellow, the teeth black. Palpi rufo-testaceous.

Neotheronia claripennis, sp.n.

Head and thorax yellow, the abdomen brownish testaceous, an irregular line on the sides of the first, and slightly more than the basal half of the others black; tips of mandibles, an irregular line joining the hinder ocelli to the eyes, a slightly narrower line round the apex of the vertex, three broad lines on the mesonotum, the central beginning at the base, the others beyond it; the lateral depressions at the sides of the scutellums, a longish triangular mark on the apical half of the

basal part of the metanotum between the keels, a larger, more distinct triangular spot on the apex, a line on the apex of propleuræ on the upper two-thirds and a similar line on the apex of mesopleuræ, black. Antennæ with the scape yellow, lined with black above, the flagellum dark rufous, darker above and below at the apex. Wings hyaline, unclouded, the costa and stigma testaceous, the nervures black, the areolet five-angled, the nervures closely meeting in front, the recurrent nervure interstitial. On the metanotum in the middle are two keels, forming an area of equal width; on the sides is a keel on the apical two-thirds, there is a complete keel outside the spiracles and there is a keel on the lower side of the metapleuræ. The apical two joints of the hind tarsi are infuscated; the fore-legs are of a brighter yellow than the others. Female and Male.

Face closely weakly punctured, densely covered with short pale pubescence. Eyes distinctly converging below, about one-fourth narrower at their end than on the vertex. Thorax smooth, impunctate; the parapsidal furrows weakly indicated on basal slope. Abdominal petiole three times as long as it is wide at the apex. Ovipositor testaceous, blackish at the apex, as long as the hind tarsi. There is a blackish streak on the upper, inner side of the hind femora, the hind knees being also black.

Length 9 m.m.; terebra 3 m.m.

Temples distinctly roundly narrowed. The apical black mark on the metanotum may be absent. The mandibular teeth are almost equal in length.

OPHIONIDAE.

LABENINI.

Nonus biannulatus, sp.n.

Black, the maxillary palpi, the basal three joints of the flagellum of antennæ and a wider ring in its middle, white, as is also the apical fourth of the sheaths of the ovipositor; the fore femora above and the apical joint of the trochanters pale testaceous, the tibiæ on the inner side in front and entirely so behind testaceous, the rest fuscous, the basal three joints of the tarsi pallid fuscous; the basal two of the middle of a paler fuscous colour; the apical third of the basal joint of the hind tarsi and the whole of the second and third white. Wings hyaline, the nervures and stigma black, the areolet in front one-quarter longer along the radius than it is along the first transverse cubital nervure; it is a little wider at the apex than at the base and receives the recurrent nervure in the apex of the basal fourth; the radius is roundly, broadly curved beyond the areolet; the transverse median nervure is received at the apex of the basal fourth of the nervure; the transverse cubital nervure in hind wings is broken half-way between the middle and the apex. Female.

Length 17 m.m.; terebra 8 m.m.

Smooth, the basal half of the second abdominal segment finely, closely punctured, and with some fine striæ, the base at the sides keeled; the pleuræ and coxæ densely covered with white pubescence. There is a wide, longish furrow.

with sloping sides, along the mesopleuræ above the middle. There is a curved keel, narrowed at the base, diverging in front, at the base of the metanotum ; there are three areæ on its apex ; the central large, roundly dilated at the base, the sides above obliquely narrowed, the lateral areæ widened above.

OPHIONINÆ.

Ophion latilineatus, sp.n.

Ferruginous, the head bright yellow, the thorax of a paler yellow, with three broad fuscous lines on the mesonotum, the antennæ blackish, reddish brown at the base below and towards the apex above ; wings hyaline, the stigma and costa ferruginous, the nervures black, the base of radius thickened ; the recurrent nervure one-quarter longer than the transverse cubital, which is roundly curved ; the basal transverse keel on the metanotum roundly curved in the middle ; the basal three or four transverse striæ straight, the others thicker and broadly roundly curved ; the upper basal half of the metapleuræ irregularly obliquely striated. Apical slope of scutellum rather strongly, but not closely striated. Male.

Length 32 m.m.

Post-petiole distinctly separated ; thickened ; the fourth and following abdominal segments thicker than the others. The apical part of the disco-cubital nervure is broadly roundly curved ; widely bullated at the base, as is also the recurrent nervure near the top.

Enicospilus flavus, Bé.

Ophion flavus, Bouché, Hymén, iv, 139.

There are two horny points in the wings, a large semi-circular one, rounded at the top, transverse behind, and gradually narrowed to a point below ; and a minute one, widely separated from it ; the large one has no continuation ; the recurrent nervure is separated from the transverse cubital by three times the length of the latter ; the nervures are black ; the basal abscissa of the radius thickened and slightly, broadly curved. The striæ on the top of the metanotum are almost longitudinal and irregular ; on the rest of it stronger and oblique.

Enicospilus guyanensis, sp.n.

Luteous, the head pallid yellow, the antennæ of a deeper, more rufous colour wings hyaline, the stigma and nervures ferruginous, the apical nervures darker in tint, the basal horny point large, transverse below, the top basal half roundly widened from the base upwards, the smaller, apical half oblique on the upper two-thirds, the lower projecting into a point, which becomes gradually narrowed towards the apex, the second point is small, its apex broad, rounded, the lower edge rounded, the upper rounded inwardly ; the apical abscissa of the disco-cubital nervure fully one-third longer than the transverse cubital, which is rounded. Basal half of the scutellum with a shallow furrow down the middle ; the apical slope with two long and two short stout striæ. Metanotum with irregular longitudinal striæ in the middle of the base, the sides more strongly obliquely striated, the apex with rounded striæ. The middle of mesopleuræ broadly, finely obliquely

striated, the striæ stronger on the lower half. Except on the basal and lower parts the metapleuræ are finely striated and punctured. There is a broad black mark in the middle of the seventh abdominal segment on the sides.

Enicospilus parvifasciatus, sp.n.

Luteous, the head yellow, the thorax paler, more yellowish in tint, the antennæ more rufous, the apical abdominal segments darker than the basal; three large broad black marks on the mesonotum, a black mark on the apex of the mesopleuræ, commencing near the top and reaching below nearer to the bottom, it becomes gradually widened from the top to the bottom, with the apex and lower side straight; the legs paler in tint than the body; wings hyaline, a small triangular cloud, longer than it is wide at the apex, filling the base of the radial cellule, the costa rufo-testaceous, the stigma and nervures black; the recurrent nervure separated from the transverse cubital by four times the length of the latter; the basal abscissa of the radius is thickened to the middle; the transverse median nervure interstitial. The base of metanotum is smooth; the upper part of the apical part is smooth, except for a straight and two curved striæ in the centre; the rest strongly, closely transversely striated. There is only one horny point in the forewings; it is conical, longer than it is wide at the apex; the top narrowed, rounded end at the base, the apex transverse except for a small projection on the lower edge. Female.

Length 18 m.m.

Enicospilus maculiceps, sp.n.

Luteous, the stemmaticum black, the apical three abdominal segments dark fuscous, the wings hyaline, the costa, stigma and nervures blackish, the transverse median nervure received very shortly beyond the transverse basal, the recurrent nervure distant from the transverse cubital fully four times the length of the latter; there is only one horny point; it is almost semi-circular, the rounded end in front. Metanotum strongly striated; the striæ in the centre of the base transverse, those on the sides roundly, obliquely curved, the others closely, strongly transverse.

Comes near to *E. flavus*, Bé., it may be known from it by the third and fourth abdominal segments being black, by there being two horny points in the wings, the larger apical one being differently formed, it becoming gradually narrowed to a fine point, the antennæ are darker coloured, fuscous to black, and the metanotal striæ are stronger, closer and run into reticulations.

Thyreodon nigro-caeruleus, sp.n.

Black, tinged with blue on the pleuræ and metanotum; wings uniformly fuscous-violaceous, the nervures and stigma black. Face covered with pale, the thorax more densely with longer black pubescence, which is longest on the scutellum. Head and thorax closely punctured, the centre of the scutellum moothier than the sides. The sides of the metanotum finely, sparsely punctured, the centre raised, irregularly longitudinally reticulated; the top of the slope finely, obliquely striated, the striæ interlacing; the sides below are more strongly obliquely striated, smooth on the inner side; the central furrow is

strongly not very closely, transversely striated. Metapleuræ closely finely obliquely striated. Front broadly raised between the antennæ and ocelli, the sides depressed, the depression narrowed above, the bottom, except at the top, finely, closely striated. Female.

Length 27 m.m.

Apex of clypeus transverse, its sides broadly rounded. Sides of scutellum keeled to shortly beyond the middle.

Anomalinae.

The only member of this group in the collection is treated by Szépligeti (Gen. Ins. Ichn. Ophon, p. 3.) as a distinct group—*Xiphiosominae*.

Xiphosoma mexicanum Cr.

Proc. Acad. Phil. 1873, 380.

A specimen smaller than any I have seen from Central America.

Obs. *Iphisoma* as printed in Mr. Cresson's papers *l.c.* seems to be a printer's error for *Xipho oma*. The species appears to have a wide distribution.

Xiphosoma striatum, sp.n.

Rufo-testaceous, the head more yellowish in tint (the rufous tinge may be owing to discolouration), the antennæ, the depressed central part of front, the stemmaticum, occiput, three large marks on mesonotum, apex of scutellum, post-scutellum, a stripe on the base of metanotum, narrowed in the middle, a large mark, longer than wide, sharply narrowed above, transverse below, on the basal two-thirds of the apical slope, an oblique line, commencing at the tubercles, where it is widened at the base and apex and running obliquely to near the bottom of the apex, its middle narrowed, rounded at the apex, the lower part with the apex squarely dilated, a small spot on the base of the sternal furrow, the base of the metapleuræ, the base of petiole narrowly, the post-petiole, and the top of the other segments, black; the four front legs pale yellow, the femora tinged with testaceous, the apices of the middle tarsal joints infuscated; hind legs black, the apex of coxæ narrowly, the greater part of the apical joint of the trochanters, a broad line on the apex of the femora and a narrow one on its apex, rufo-testaceous. Wings hyaline, the apex faintly and narrowly smoky, the stigma and nervures black; the areolet oblique, narrow, twice longer than wide, pedunculated, the pedicle longer than the lower branch, the recurrent and the transverse median nervures interstitial. Female.

Length 12 m.m.; terebra 4 m.m.

Head smooth, a curved furrow bordering the outside of the ocelli, the part outside the furrow, next to the eyes raised; the frontal depression finely, closely striated. Mesonotum trilobate, strongly, but not very closely punctured; the scutellums smooth. Metanotum finely, closely striated, the striae stronger on the outer edge. Mesopleuræ sparsely punctured on lower half; there is an oblique depression down the centre. Femoral tooth oblique, acutely pointed, longer than it is wide at the base.

This is a smaller species than *X. mexicanum*, Cr. ; that species has the metanotum smooth, and on it, instead of a large conical black mark, has a black line.

CAMPOPLEGINI.

Campoplex watertoni, sp.n.

Black, the head and thorax densely covered with silvery pubescence, the antennal scape, tegulæ and four front legs bright yellow, the hind legs and the abdomen ferruginous, the wings hyaline, the stigma and nervures black, the areolet large, shortly, distinctly appendiculated, four-angled, the recurrent nervure received near the apex of the basal third ; the apex of the forewings with a smoky border. Male.

Length 8 m.m.

Head alutaceous, the lower part of the vertex and the centre of the front with fine curved striæ. Mesonotum closely, somewhat strongly punctured, the sides more strongly than the middle. Metanotum with two central and one large lateral area ; the areola open at the apex ; the base is aciculated, the rest irregularly, transversely striated. Pleuræ smooth, shining, the apex in the centre irregularly striated. Basal half of mesopleuræ longitudinally striated, the striæ shorter in the middle, the apical half smooth and shining. Metapleuræ finely, weakly punctured, shining, the top densely covered with longish white pubescence.

Podogaster rufomaculatus, sp. n.

Black, the apical half of clypeus, mandibles except the teeth, pleuræ, sternum, apex of metanotum narrowly, the basal third of first abdominal segment and the under-side of antennal scape pale rufous, the sides of the third and fourth abdominal segments rufo-testaceous ; the four front legs similarly coloured, but more yellowish paler, their tarsi fuscous ; the hind legs black, the basal half of their coxæ pale rufous, the trochanters and knees fuscous, the wings hyaline, the nervures and stigma black, the transverse median nervure received very shortly beyond the transverse basal, almost interstitial, the transverse cubital nervure very short, the recurrent nervure received four times its length beyond it ; the apical nervures in the hind wings are obliterated. Male.

Length 7 m.m.

Smooth and shining, the metanotum aciculated, the aciculation becoming stronger towards the apex, which is beyond the apical keel, transversely, closely striated. The lower part of the mesopleuræ and the metapleuræ are minutely closely punctured. There are two longitudinal keels on the base of the metanotum in the centre, forming an area of equal width, twice longer than wide ; the transverse keel is bent obliquely towards it, uniting to its outer apical side ; the apical transverse keel is roundly curved.

Eutanygaster gen. nov.

Wings short, the stigma distinct, the basal two cubital cellules confluent with the disevidal cellules, the cubitus commencing at the second transverse cubital nervure, which is received close to the first ; the transverse median nervure

is interstitial; the apical nervures in the hind wings are interstitial; the radial cellule long, reaching to the apex of the wing; the radius issues from the middle of the stigma. Eyes large, reaching to the base of the stigma. Mandibles almost equally bidentate. Parapsidal furrows distinct at the base. Metanotum long, transversely striated, the base with a semi-circular area on either side; the spiracles small, oval; the slope is gradual, oblique. Abdomen four times as long as the thorax, strongly compressed, curved roundly, the first segment shorter than the second, its apex dilated. Legs long, the middle tibiæ with two spurs, the long spur of the hinder nearly half the metatarsus; the tarsi closely, distinctly spinose.

The apex of the thorax does not project into a neck, but is transverse and very little narrowed. The mandibular teeth almost equal in length. Clypeus not separated from the face by a distinct furrow; its apex broadly rounded, ovipositor projecting one-third of the length of the abdomen.

This genus resembles in the body form *Podogaster* and certainly it is closely allied to it, but may readily be separated from it by both the transverse cubital nervures being united to the radius and clearly separated at their junction with it, by there being a distinct pterostigma, by the transverse median nervure being interstitial and by there being two areæ on the base of the metanotum.

Eutanygaster brevipennis, sp. n.

Black, the mandibles except the teeth, palpi, tegulæ, and almost the basal half of the first abdominal segment pallid testaceous, the apices of the second, third and fourth ventral segments of a deeper, darker testaceous, the four front legs testaceous, the hinder black, except the apical joint of the trochanters, the apex of femora narrowly and the spurs which are testaceous; wings clear hyaline, the stigma and nervures black. Female.

Length 9 m.m.; terebra 2 m.m.

Smooth, shining, almost bare, the metanotum slightly depressed in the middle, finely closely transversely striated; the metapleuræ and the hind coxæ finely closely punctured, the upper part of the mesopleuræ raised; below is an oblique, smooth shallow depression, the rest is sparsely weakly punctured. Face sparsely, weakly, but distinctly punctured.

Charops peronatus, sp. n.

Black, the head and thorax densely covered with silvery pubescence, the apical abdominal segments with a shorter and sparser pile, the mandibles, palpi, underside of antennal scape and the tegulæ, pallid yellow, the ventral surface of the second and the base of the third ventral surface pallid testaceous; legs, the anterior with the coxæ black, the trochanters, the outside of the tibiæ and the spurs pallid yellow, the rest testaceous; the middle with the coxæ, basal joint of trochanters, almost the basal half of the femora and the apical fourth of the tibiæ black; the rest of femora rufo-testaceous, the tibiæ and tarsi pallid yellow, the apices of the tarsal joints blackish; the hind legs black, except for a pale yellow band, commencing near the apex of the basal fourth and extending

shortly beyond the middle ; the four front spurs white, the posterior black. Wings hyaline, the nervures and stigma black ; the transverse median nervure received shortly beyond the transverse basal ; the recurrent half its length beyond the transverse cubital. Female.

Length 5 m.m.

Head closely, minutely punctured, the front obscurely, closely obliquely striated, especially on the sides. Mesonotum finely punctured in the middle, the sides irregularly transversely striated, scutellum margined on the sides, an obscure keel down the middle, the rest finely rugose. Metanotum rugosely punctured, the centre closely, distinctly striated, this striated part margined by keels, which converge slightly at the base. Propleuræ finely rugose, striated at the base and apex ; mesopleuræ with a broad curved striated belt, commencing at the base above and reaching to the apex below. Metapleuræ finely irregularly punctured, the lower basal part irregularly striated. The pubescence on the metathorax is longer and denser than elsewhere.

Charops latiannulatus, sp.n.

Black, the antennal scape except for a line on the outside, the mandibles, tegulæ, the forelegs except the coxæ and basal joint of the trochanters testaceous, the four hinder black, the basal two-thirds of the middle tibiæ and a broad ring on the hinder, commencing near the base and extending shortly beyond the middle ; the four front spurs testaceous, the hinder black ; wings hyaline, the nervures and stigma black, the nervures as in the preceding species. There is a pale, testaceous spot on either side of the middle of the second abdominal segment ; the apices of the ventral segments pale testaceous. Male.

Length 7 m.m.

Face closely, the clypeus sparsely punctured ; the space below the ocelli closely irregularly striated, the frontal depression shining. Mesonotum finely closely punctured, the furrows irregularly widely closely transversely striated. Scutellum smooth. Base of metanotum finely, closely, irregularly longitudinally striated, the rest of it almost rugosely punctured ; the middle space widely, the sides closely obliquely, the centre at the apex more transversely striated, the apical slope more strongly transversely striated, the striæ more or less twisted. The spines large, conical, broad at the base. Base of propleuræ with some stout vertical striæ, the rest finely, closely, longitudinally striated above, below much more strongly striated. Mesopleuræ closely longitudinally striated except for the usual smooth, shining space at the apex above. Metapleuræ more strongly obliquely striated, the striæ more or less twisted. Abdomen smooth.

PRISTOMERINÆ.

Pristomerus tricarinatus, sp.n.

Black, the prothorax, meso- and metapleuræ and sternum pale rufous, as is also the extreme apex of the metanotum ; the basal half of first abdominal segment pale yellow, the sides of the third and fourth testaceous, the four front legs pallid yellow, the femora slightly tinged with fulvous ; the band legs black.

the basal half of the hind coxæ pallid fulvous, the trochanters testaceous marked with black laterally; the extreme base of the femora and their apex more broadly pale yellow; wings hyaline, the stigma and costa black. Male.

Length 7 m.m.

The apical half of the clypeus, mandibles, except the teeth and the palpi pale testaceous, as well as a narrow line at the eyes opposite the antennæ. Face smooth, shining, sparsely covered with short white pubescence; the front and vertex alutaceous. Ocelli large, amber coloured. Pro- and mesothorax smooth, the mesopleuræ finely punctured, except at the apex above; the mesonotum finely, closely, transversely striated, more strongly so towards the apex; the basal area twice longer than wide, narrowed towards the apex; the basal transverse keel obliquely turned to the outer apical side; the second is near the apex and is broadly roundly curved; there is a similar keel at the extreme apex. There are four small teeth—rounded, indistinct—on the apex of the hind femora beyond the large one.

Pharsaliinae.

The curious genus *Pharsalia*, Cresson is placed by Ashmead in the *Nototrachini* (Bull. U. S. Nat. Mus. xxiii, 88) along with *Nototrachus* and *Eugnomus*; by Szépligeti in a sub-family of the *Ophionidae*, an arrangement with which I agree with him. cf. Gen. Ins. *Ichneumonidae Ophionidae*, 3. Its alar meuration, is not unlike that of *Ropronia*, a genus which has been referred to the *Proctotrypoidea* and which has also been made the type of a distinct family by Mr. J. C. Bradley.

There are three points in the male which have not been pointed out by the writers who have described this genus, namely, the eyes in the male are pilose and the costa extends as a thickened vein, about two-thirds of the length of the radial cellule in front and beyond it; in the male the genital armature largely projects—to a greater extent than the length of the last segment; it is in the form of two broad, knife-like projections, with the basal third wider than the rest. There are two spurs on the hinder tibiæ, one only on the four anterior.

Ophionellus, West, appears to be identical with *Pharsalia*; in *O. fragilis*, West, the type of the genus, the antennæ are said to be from 30-40-jointed, as against 25 in the species I have described.

Pharsalia annulipes, sp.n.

Black, the underside of antennal scape, two longish triangular marks on the top of the face, united above and continued as a short line along the eyes, reaching to shortly above the antennæ, malar space, mandibles except the teeth, palpi, a short line on the upper, outer orbits, and the tegulæ, whitish yellow, legs; the anterior rufo-testaceous, the tarsi paler, the coxæ and basal joint of trochanters pallid yellow, the middle coxæ, basal joint of trochanters, a band of the length of the second tarsal joint on the base of the tibiæ and the basal three tarsal joints, white, the femora rufous, the tibiæ of a darker rufous

colour, the rest of the legs blackish ; the hind legs black, the basal joint of the trochanters and a band of about its length on the base of the tibiæ, white wings hyaline, the stigma black, the nervures pale. Female.

Length 13 m.m.

Head and thorax densely covered with a silvery pile, which is longest on the face and breast. Head smooth, the base and sides of mesonotum smooth, the rest coarsely reticulated—punctured ; there is a double row of punctures along the sides. The long metanotum is furrowed down the sides and is transversely reticulated. The base of the propleuræ is smooth, bare and has a row of punctures down the lower basal half ; the apex of the mesopleuræ is bare, has a crenulated furrow on the apex and some striæ on the lower apical half ; the upper half of the metapleuræ reticulated, the reticulations almost hidden by the dense silky pubescence. The apices of the third, fourth and fifth segments are testaceous. The antennæ are covered with a short, dense blackish pile ; they are 25 jointed.
